

ABSTRACT OF THE DISCLOSURE

A computer-based software task management system includes an index register configured to store a data register pointer for pointing to a data register. A Task ID register is coupled to the index register and configured to store a Task ID keyed to the index register. A Task ID memory is coupled to the Task ID register and configured to store a flag indicating whether the Task ID is available. A state machine is coupled to the Task ID memory and configured to allocate Task IDs on an available basis using a task ID memory.